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CLAIMS:

1. A solid oxide fuel cell system component which is adapted to be exposed to an oxidising atmosphere in the fuel cell system and which is formed of a heat resistant alloy having a composition, in wt%, of:

Al 5.0 - 10.0

Si 0.1 - 3.8

Mn \leq 0.5

Cu \leq 0.23

Ni \leq 0.61

C \leq 0.02

P \leq 0.04

S \leq 0.04

Cr $<$ 5.0

Residue Fe, excluding incidental impurities.

2. A solid oxide fuel cell system component according to claim 1 which contains no more than about 8.5 wt% Al.

3. A solid oxide fuel cell system component according to claim 1 or 2 which contains less than 0.05 wt% Mn.

4. A solid oxide fuel cell system component according to any one of claims 1 to 3 wherein the alloy has a composition, in wt%, of:

Al 6.0 ± 1.0

Si 1.0 ± 0.5

C 0.005 - 0.02

P \leq 0.04

S \leq 0.04

Cr \leq 0.10

(Al + Si) = 6.5 to 7.5

Residue Fe, excluding incidental impurities.

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5. A solid oxide fuel cell system component according to any one of the preceding claims wherein the alloy contains no Cr.

6. A solid oxide fuel cell system component according to any one of the preceding claims
5 having a surface layer of Al_2O_3 .

7. A solid oxide fuel cell system component according to claim 6 wherein the Al_2O_3 surface layer has a thickness in the range of from about 1 to about 10 microns, preferably from about 1 to about 3 microns.

8. A solid oxide fuel cell system component according to any one of the preceding claims wherein source material for the alloy at least includes scrap metal.

9. A solid oxide fuel cell system component according to any one of the preceding claims which is a gas separator disposed or adapted to be disposed between adjacent fuel cells in the system.

10. A solid oxide fuel cell system component according to any one of claims 1 to 8 which is a component selected from the group consisting of a manifold, a base plate, a current collector strap, ducting, a heat exchanger and a heat exchanger plate disposed or adapted to be disposed in the solid oxide fuel cell system.

11. A solid oxide fuel cell system in which one or more components adapted to be exposed to a temperature in excess of 750°C and an oxidising atmosphere are in accordance with any one of the preceding claims.